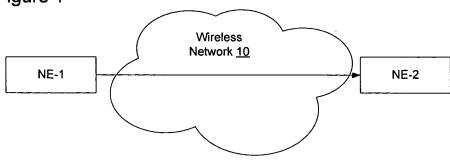
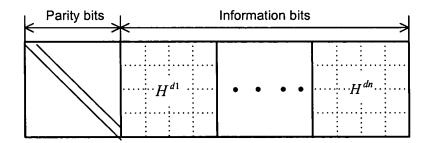
Page 1 of 5





$$H = \left[H^p, H^{d1}, ..., H^{dn}\right]$$

Figure 2



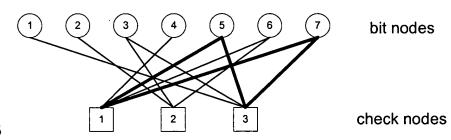


Figure 3

$$H = \left[\begin{array}{cccc} 0 & 0 & 0 & 1 & 1 & 1 & 1 \\ 0 & 1 & 1 & 0 & 0 & 1 & 0 \\ 1 & 0 & 1 & 0 & 1 & 0 & 1 \end{array} \right]$$

Page 2 of 5



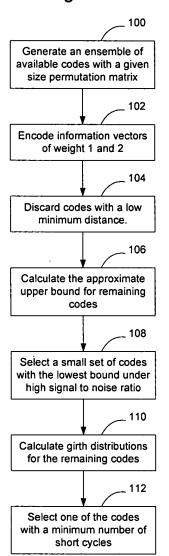
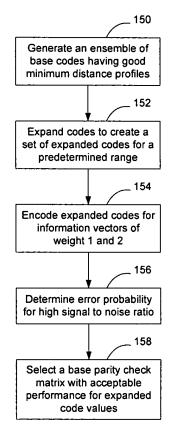
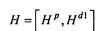


Figure 8





Parameters $[m; a_1, b_1]$

Figure 5

$\pi_A^{\frac{1}{A}}$	$\pi_B^{\ 1}$	π_C^{1}	π_D^{1}
π_B^{1}	π_C^{1}	π_D^{1}	$\pi_A^{\ 1}$
1	1		$\pi_B^{\ 1}$
1	π_A^{1}	1	π_C^1

a).Code rate 1/2

$$H = \left[H^p, H^{d1}, H^{d2}\right]$$

Parameters $[m; a_1, b_1; a_2, b_2]$

Figure 6

	π_A^{1}	π_B^{1}	π_{C}^{1}	π_D^{1}	π_A^2	π_B^2	π_C^2	π_D^2
	π_B^{1}	π_C^1	$\pi_D^{\ 1}$	π_A^{1}	π_B^2	π_C^2	π_D^2	π_A^2
	π_C^{1}	π_D^{1}	π_A^{1}	$\pi_B^{\ 1}$	π_C^2	π_D^2	$\pi_A^{\ 2}$	π_R^2
	π_D^{1}	π_A^{1}	π_B^{1}	π_C^1	π_D^2	π_A^2	π_B^2	π_C^2

b).Code rate 2/3

$$H = [H^p, H^{d1}, H^{d2}, H^{d3}]$$
 Parameters $[m; a_1, b_1; a_2, b_2; a_3, b_3]$

Figure 7

π_A^{1}	π_B^{1}	π_{C}^{1}	π_D^{1}	π_A^2	π_B^2	π_C^2	π_D^2	π_A^3	π_B^3	π_C^3	π_D^3
π_B^{1}	π_C^1	π_D^{1}	π_A^{1}	π_R^2	π_C^2	π_D^2	π_A^2	π_B^3	π_C^3	π_D^3	π_A^3
$\pi_C^{\ 1}$	π_D^{-1}	$\pi_A^{\ 1}$	π_B^{-1}	π_C^2	π_{D}^{2}	π_A^{2}	π_R^2	π_C^3	π_{D}^{3}	π_A^{3}	π_R^3
π_D^{1}	π_A^{1}	π_B^{1}	π_C^{1}	π_D^2	π_A^2	π_B^2	π_C^2	π_D^3	π_A^3	π_B^3	π_C^3

c). Code rate 3/4

Inventor: Sergey Sukhobok, et al.
Title: ALGEBRAIC LOW-DENSITY PARITY CHECK CODE DESIGN
FOR VARIABLE BLOCK SIZES AND CODE RATES
Attorney Docket No: 16811MDUS01U
Page 4 of 5

Figure 9

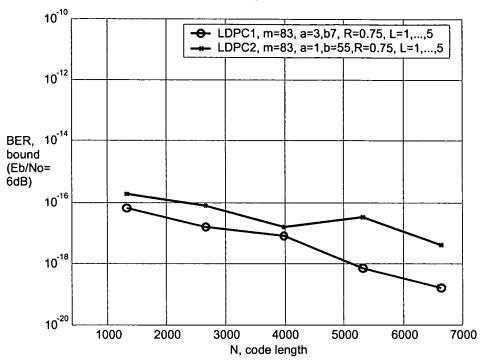
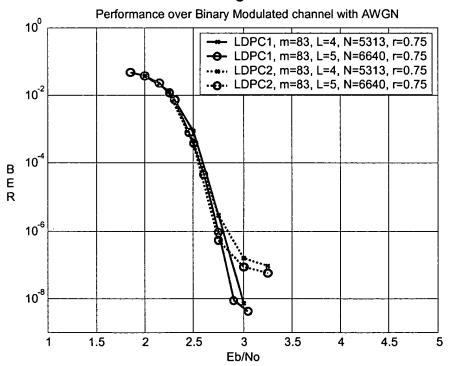


Figure 10



Inventor: Sergey Sukhobok, et al.
Title: ALGEBRAIC LOW-DENSITY PARITY CHECK CODE DESIGN
FOR VARIABLE BLOCK SIZES AND CODE RATES
Attorney Docket No: 16811MDUS01U
Page 5 of 5

Figure 11

